

BNSF Railway

Big Freight in Our Big State ***7th Annual Texas Transportation Forum***

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Network Strategy
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BNSF
RAILWAY

Agenda

- **About BNSF**
- **TransCon Corridor**
- **MidCon Corridor**
- **Rail Freight Outlook**

BNSF Railway System

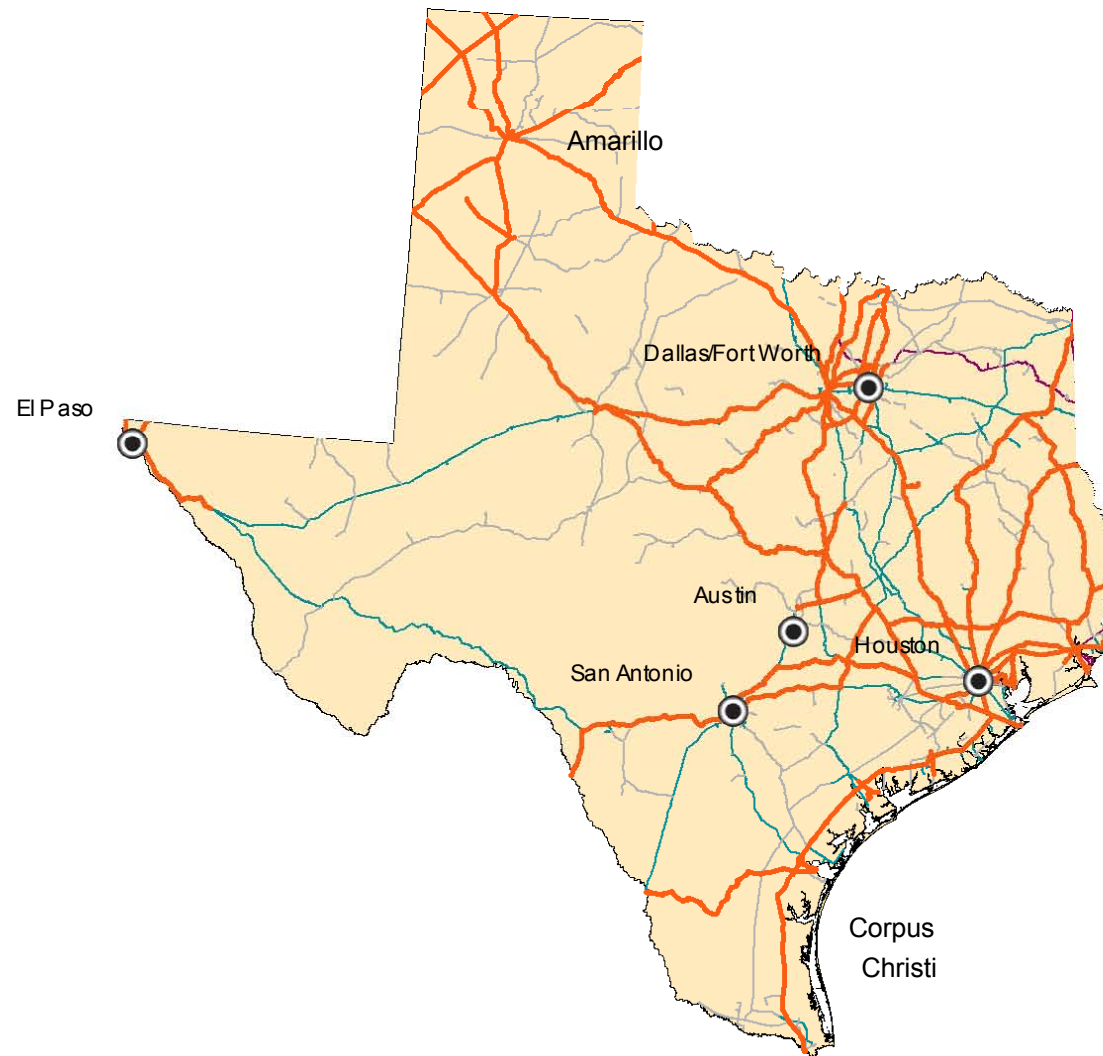


About BNSF

- **Largest North American freight railroad (units)**
- **\$17B revenue in 2010**
- **Serving 28 western US states and two Canadian provinces**
- **32,000 miles**
- **40,000 employees**
- **Owned by Berkshire Hathaway (February 2010)**
- **Headquartered in Fort Worth, TX**



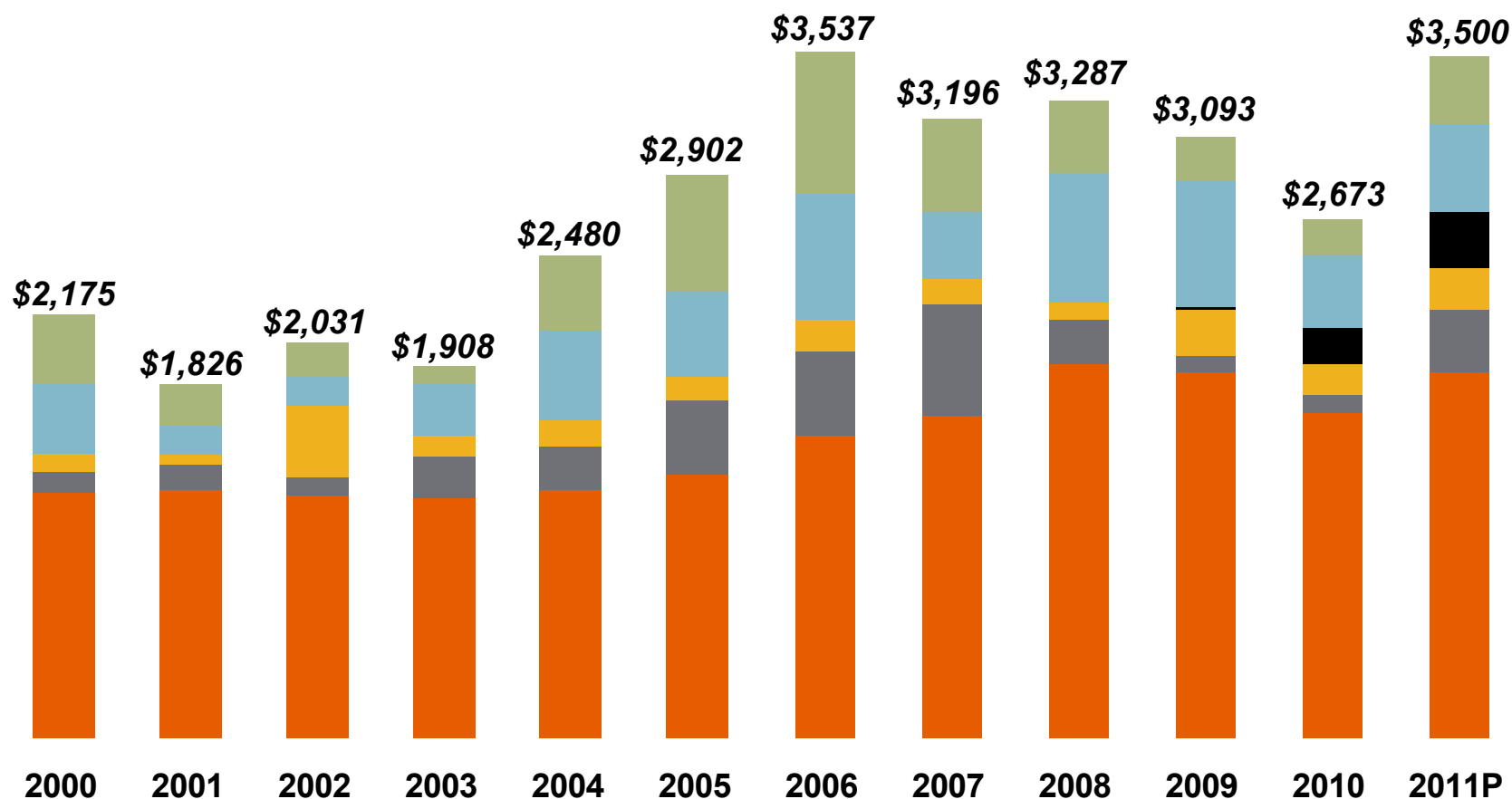
BNSF in Texas



BNSF Capital Commitments

\$ Millions

■ Replacement Capital
 ■ Expansion
 ■ Other
 ■ PTC
 ■ Locomotive
 ■ Equipment

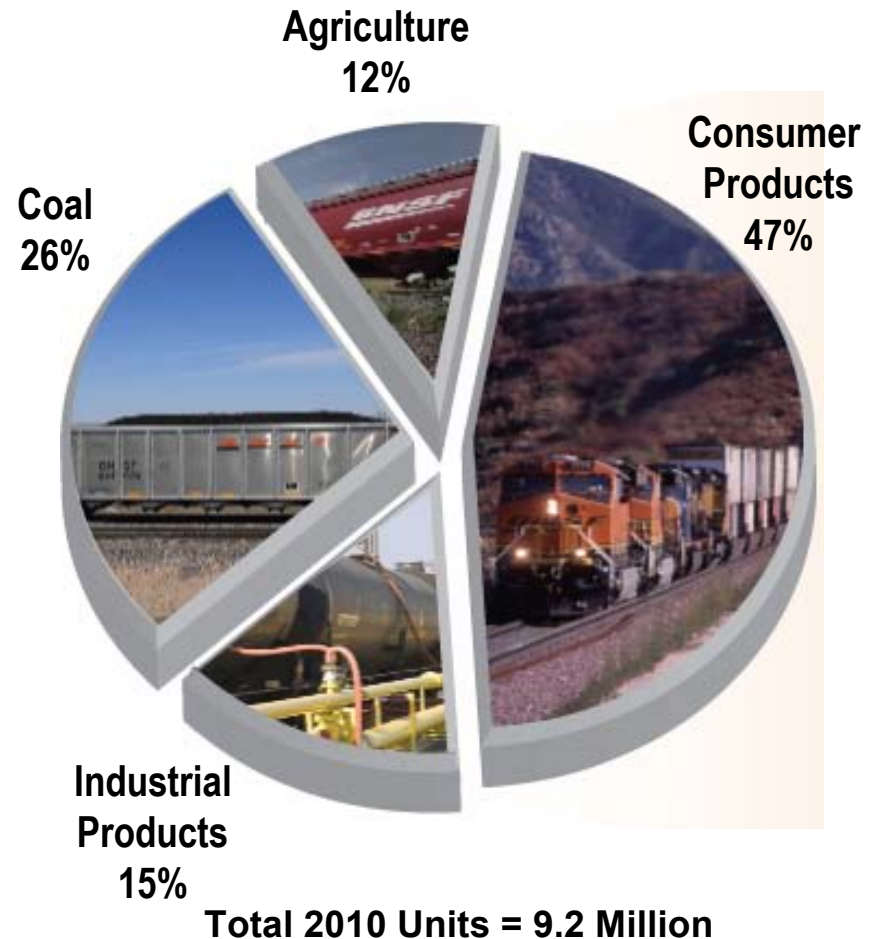


Equipment commitments reflect full amount of acquisition cost in year acquired including where cost was financed over a number of years.



BNSF Freight Markets

- North America's leading intermodal railroad
- World's largest grain hauling railroad
- The second largest coal hauling railroad
- Premier transporter of building materials
- Leading transporter of imported automobiles



Many Forms of Competition . . .

Railroads face many forms of competition

Forms of Competition	
Modal Carriers (A to B)	Rail
	Truck
	Barge
Alternatives	Source Location
	Port Routing
	Product Substitution

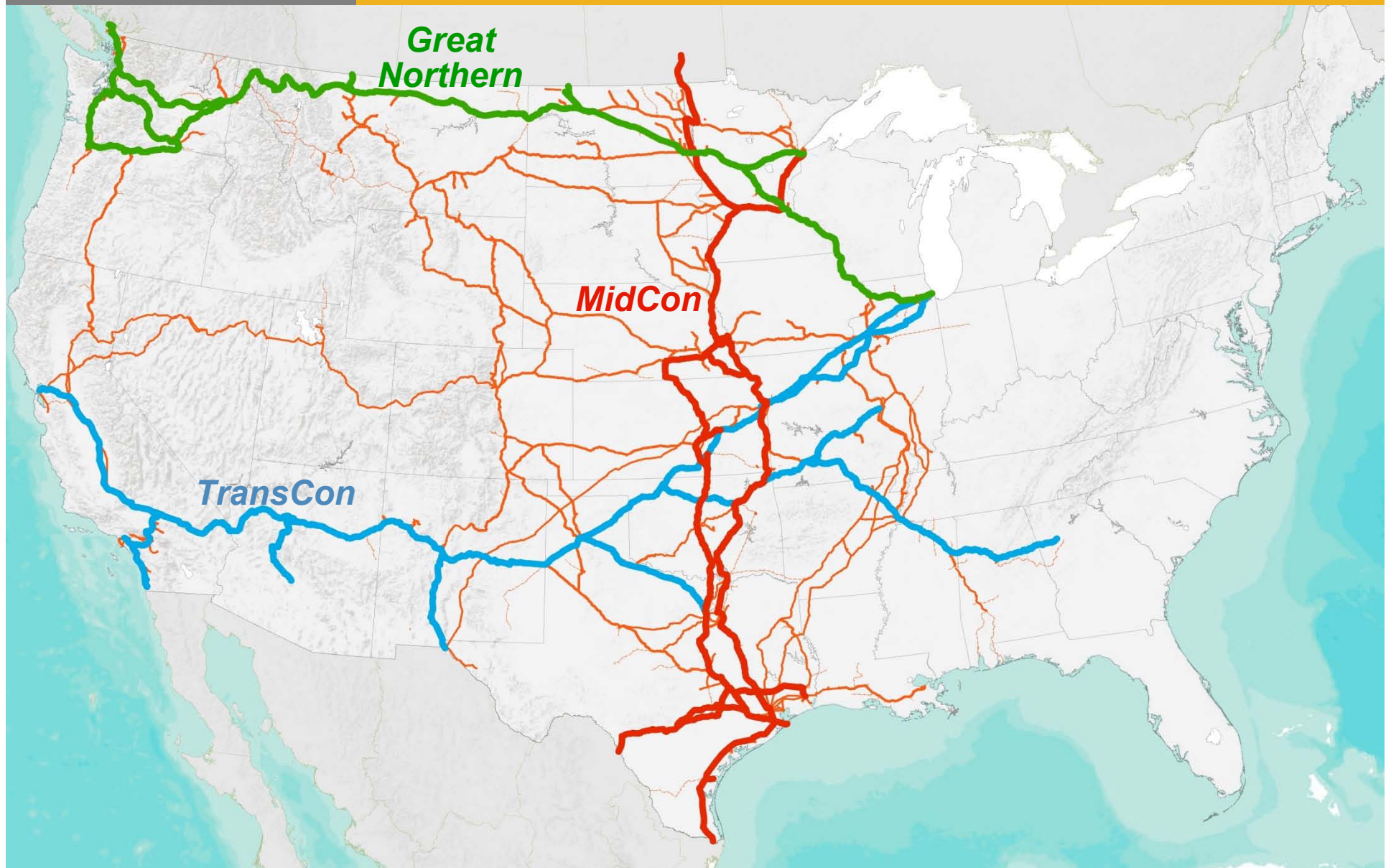
... Which Vary by Business Unit

Forms of Competition		Rail Business Unit			
		Coal	Ag.	Indust.	IM
Modal Carriers (A to B)	Rail	X	X	X	X
	Truck	x	x	X	X
	Barge	x	x	x	x
Alternatives	Source Location	X	X	X	x
	Port Routing	x	x	x	X
	Product Substitution	X	x	x	x

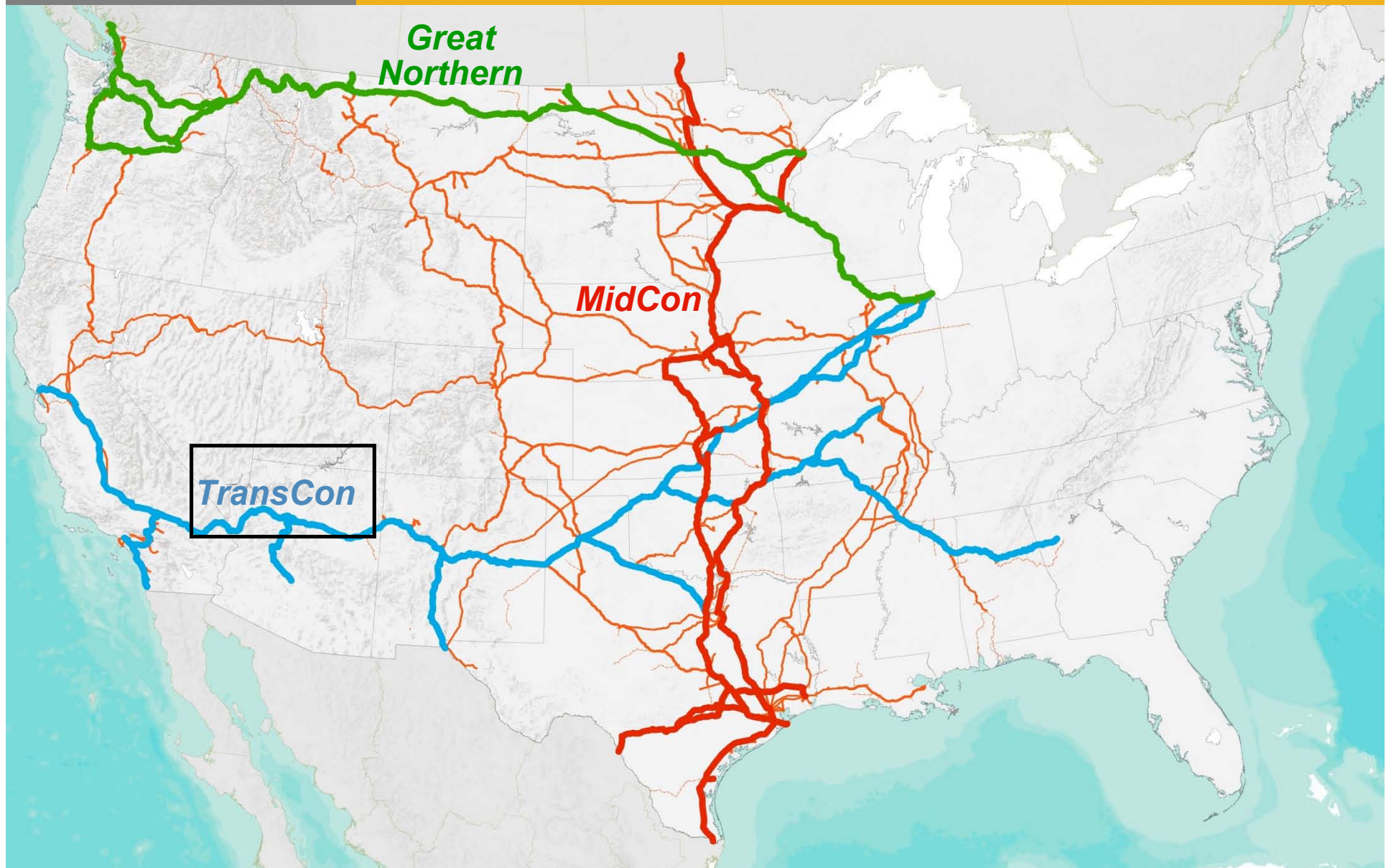
X Primary

x Secondary

BNSF Corridors of Commerce

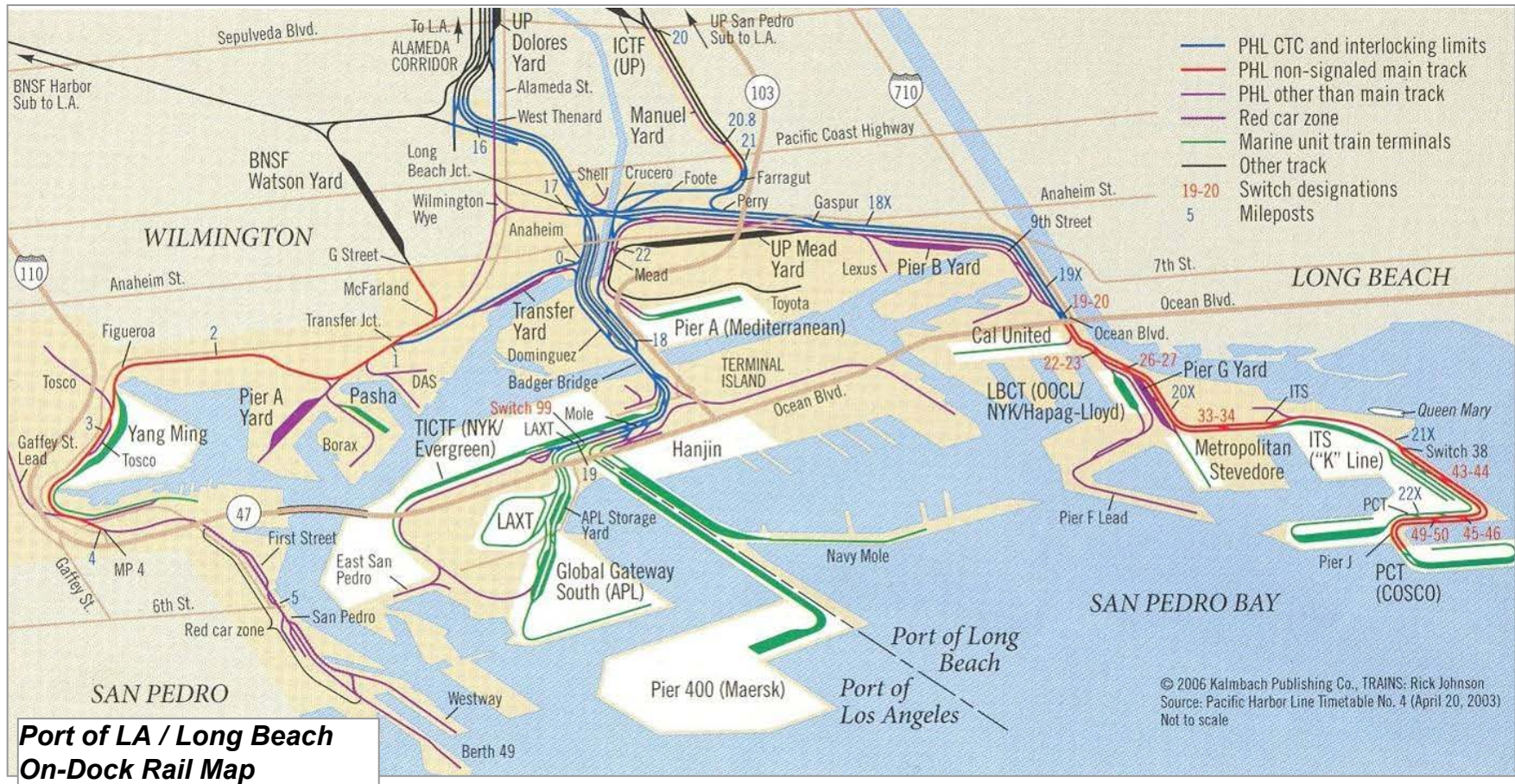


BNSF Corridors of Commerce



LA/LB On-Dock Rail Facilities

Alameda Corridor connects 10 LA/LB rail terminals with BNSF and UP's network, reducing street truck traffic to near-dock and off-dock rail terminals



Sources: *Trains Magazine*



Southern California International Gateway



\$500 Million private investment
22,000 new jobs in S. California by 2036
Eliminating 1.5M trucks from the 710

Moving Mountains for the Supply Chain



Abo Canyon

5 miles of new track

3.6 million tons of rock blasted

9 bridges constructed

Logistics Park Chicago



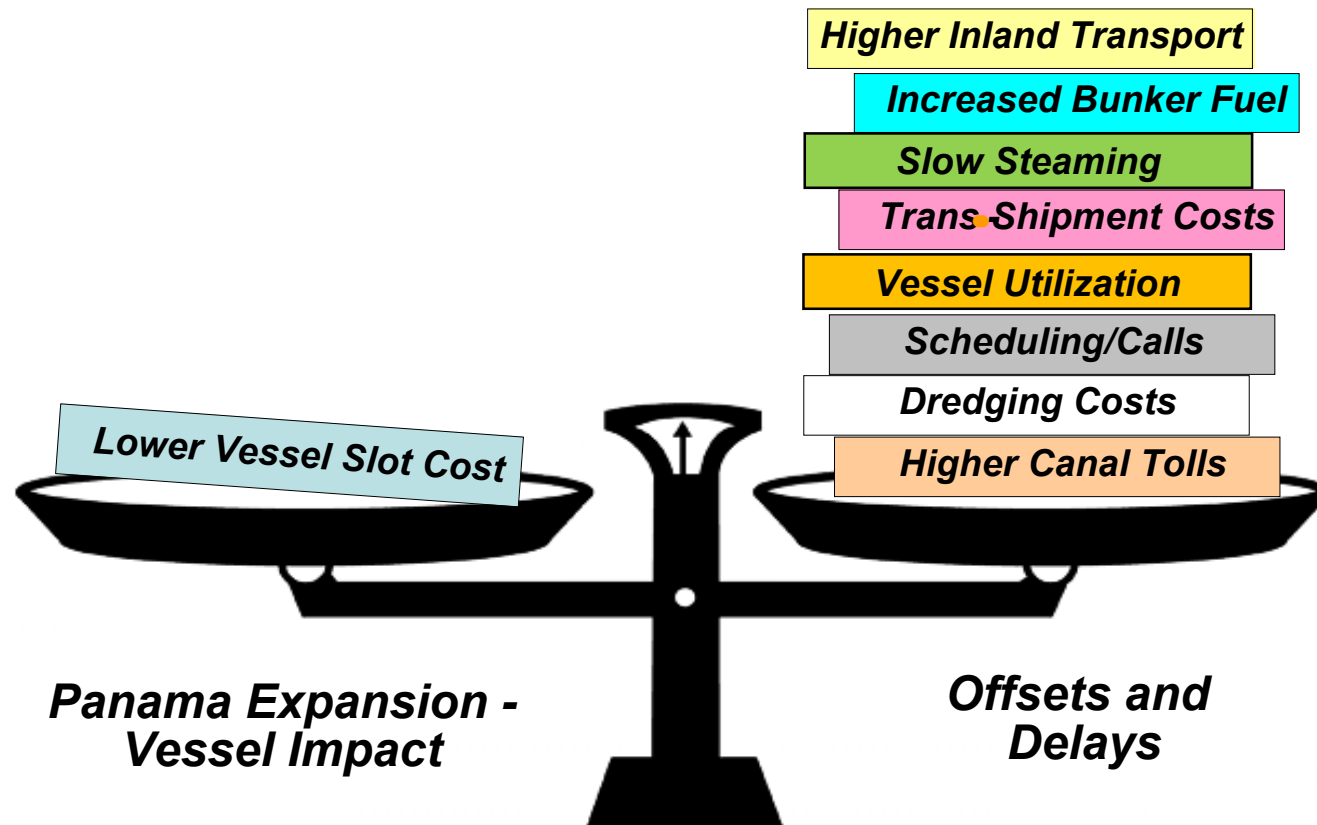
2013: Logistics Park Kansas City



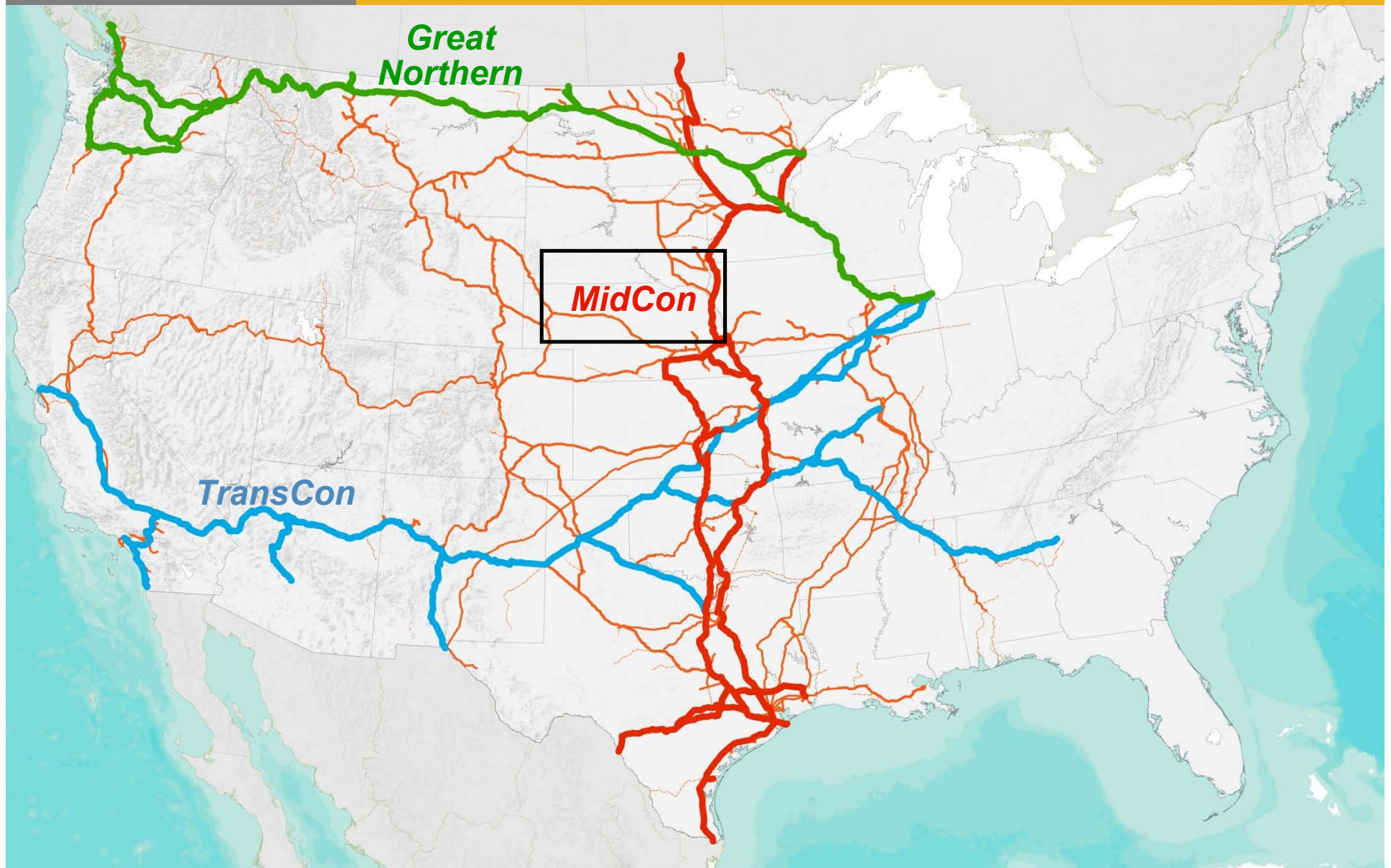
Port Challenge: Panama Expansion '14

East Coast vs. West Coast port impact will be limited by shipper situational factors, cost trade-offs, and competitive response.

Cost Trade-Offs



BNSF Corridors of Commerce



Grain Shuttle Program: Elevator

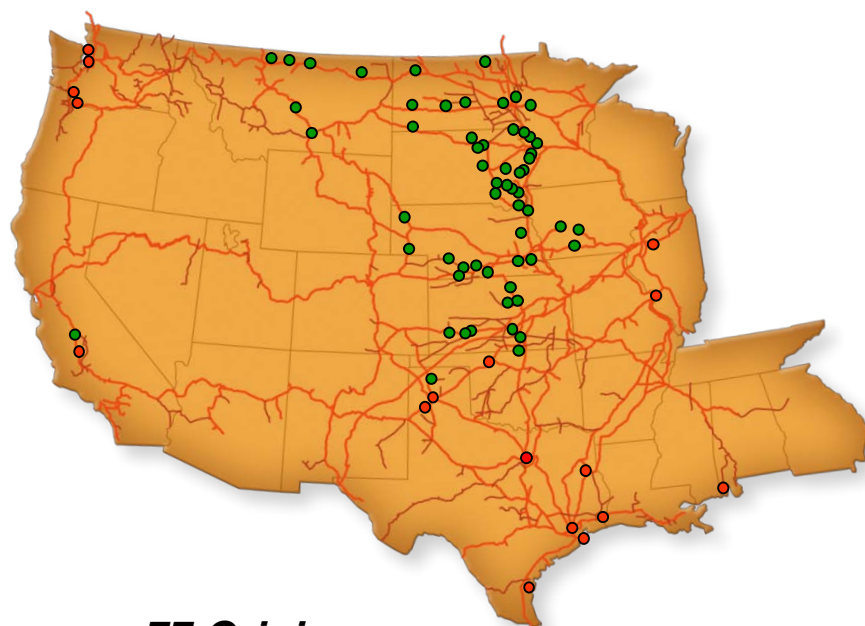
BNSF #0105 3/2006



- 110-car unit trains
- Standardized high-capacity cars
- High density lanes for export and major livestock feeding areas
- High velocity - effective asset utilization
- Receive lowest rates published and incentives efficient loading/unloading

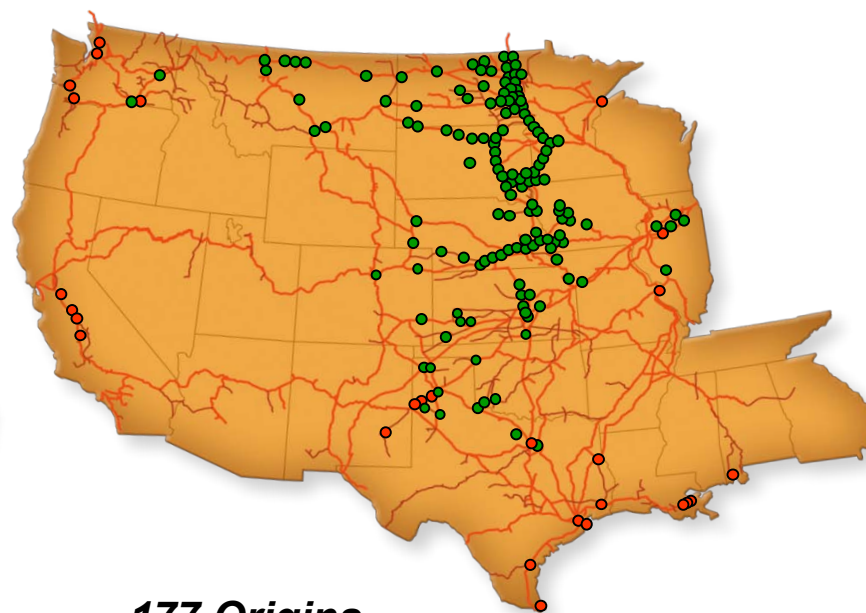
BNSF Grain Shuttle Network

2000



- **77 Origins**
- **33 US Destinations**
- **8 Mexico Shuttle Destinations**

2011



- **177 Origins**
- **78 Destinations**
- **31 Mexico Shuttle Destinations**

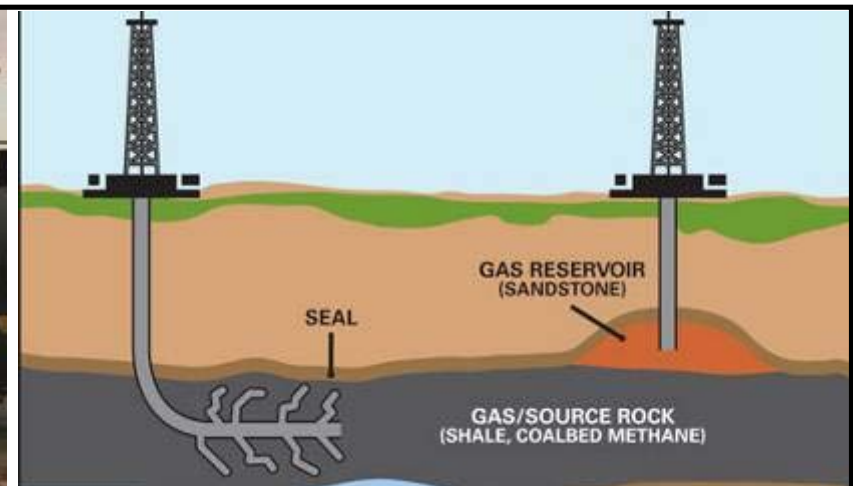
Serving the Shale Markets

Volume growth in both inbound and outbound shale-related commodities

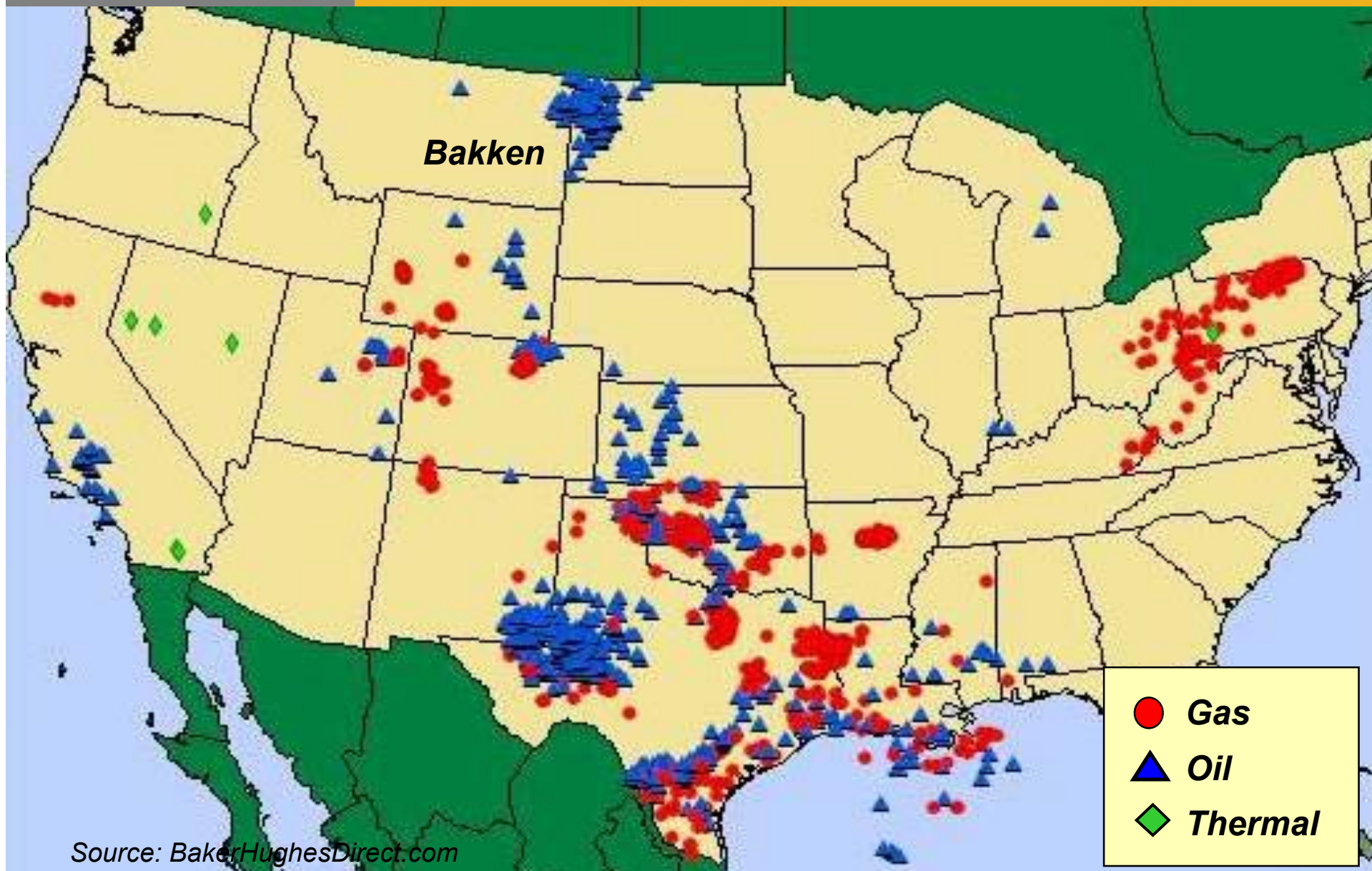
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U.S. Rig Locations

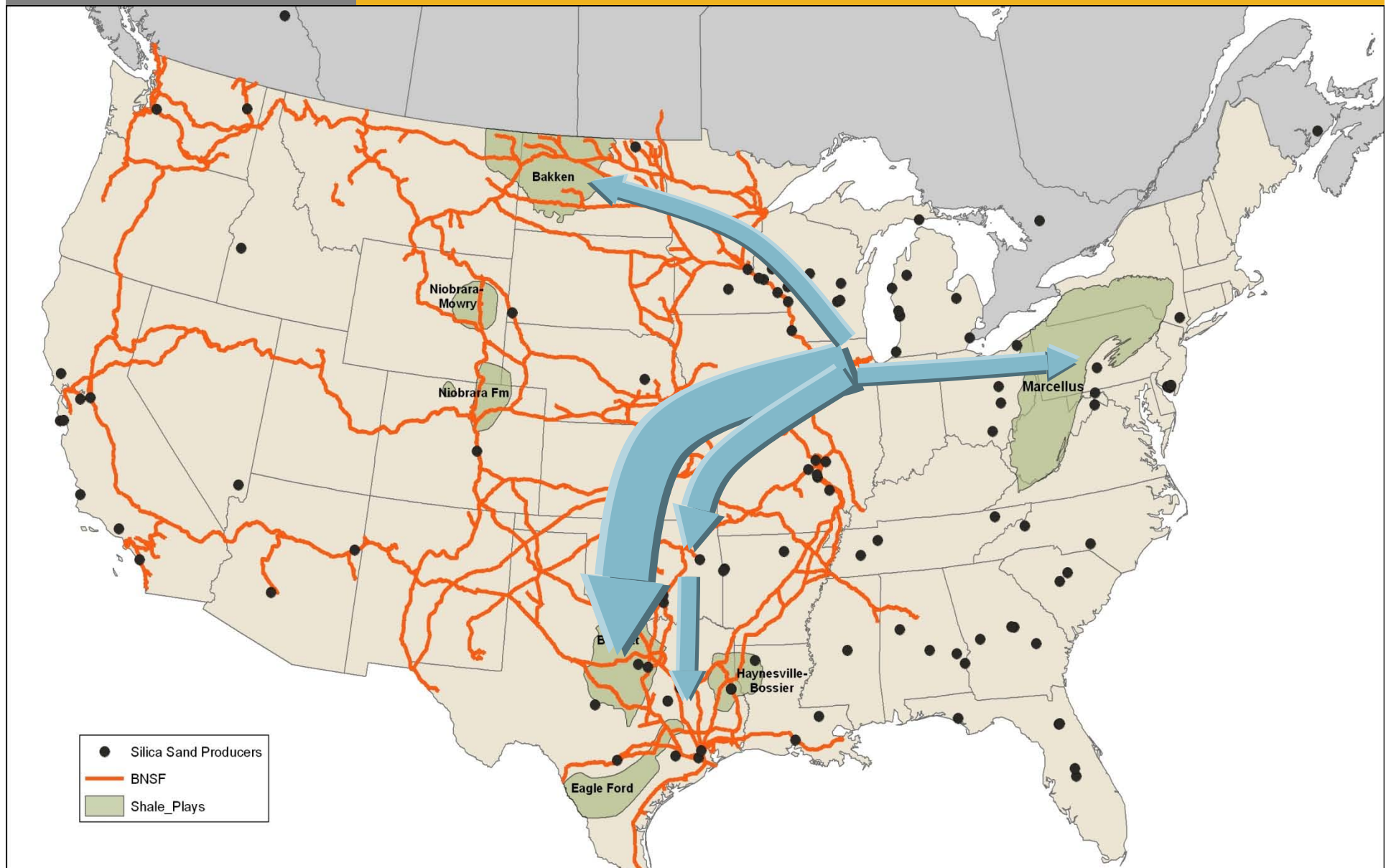


Consumption Per Rig – In Railcars

- Rail longhaul, truck delivery to rig
- Each well requires:
 - 4-6 railcars of OCTG
 - 15-30+ railcars of sand
 - 1 railcar of calcium chloride
 - 1 railcar of barite
 - ½ railcar of cement
- 178 horizontal rigs operating in North Dakota (up ~ 100% vs. 2010)



Primary BNSF Frac Sand Flows



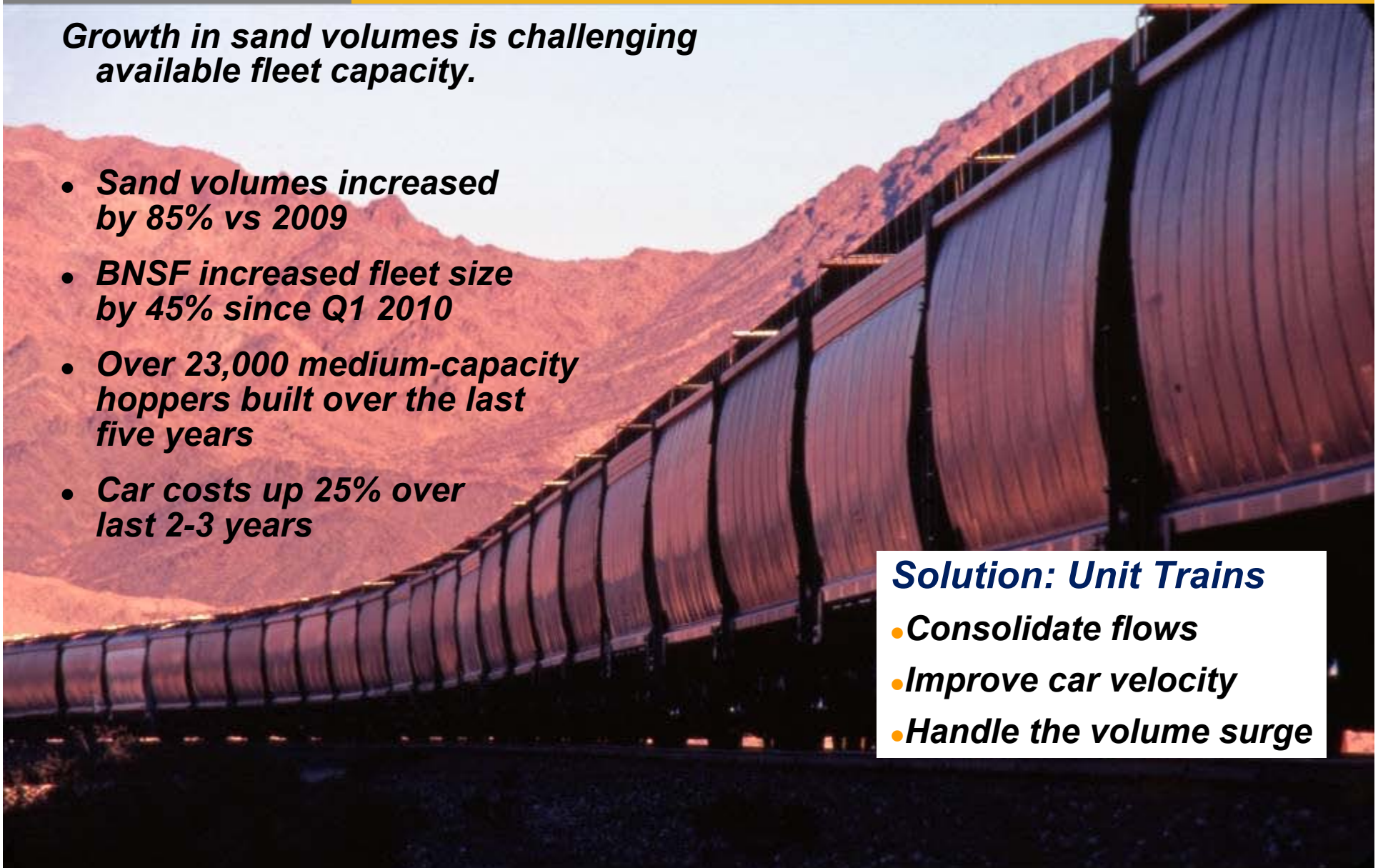
Sand Volumes Stress

Growth in sand volumes is challenging available fleet capacity.

- *Sand volumes increased by 85% vs 2009*
- *BNSF increased fleet size by 45% since Q1 2010*
- *Over 23,000 medium-capacity hoppers built over the last five years*
- *Car costs up 25% over last 2-3 years*

Solution: Unit Trains

- *Consolidate flows*
- *Improve car velocity*
- *Handle the volume surge*



Crude Oil by Rail – Rolling Pipelines

- *Unit trains*
- *Competes with pipelines*
- *Loading/unloading facilities expanding rapidly*

Tower 55 – Fort Worth, TX



The Tower 55 Project creates over \$30 in public benefits per public dollar committed.

Impact:

- Greater volume through the diamond
–approximately 34 percent capacity increase vs. current volume
 - Improved safety and livability
 - Reduced train and vehicle delay
 - Better air quality and greater fuel savings
 - Job creation and economic stimulus
- \$600 million to \$1 billion in public benefits**

Project Funding:

NCTCOG/The T	\$ 2.5M
City of Fort Worth	\$ 1.0M
TxDOT	\$ 1.0M
USDOT (TIGER II)	\$34.0M
<u>BNSF + UP</u>	<u>\$65.3M</u>
Total Project Costs	\$103.8M



Corridors and Public Policy

To keep the U.S. supply chain strong, transportation policy must:

Support the Intermodal Freight Marketplace

Expand

Structure tax & regulatory policy to encourage private investment



Maintain

Manage & mitigate freight intensity to allow growth:

- *Grade separations*
- *Yard relocations*
- *Reduce environmental impacts*

Prioritize

Focus highway investment to support intermodal:

- *Intermodal & port connectors*
- *Interstate collectors*
- *Consider rail corridor options for highway expansion*

Outlook: Growth and Challenges

2030 Growth Projections

- *Population to grow to 364 million*
- *Vehicle miles travelled to grow by 150 percent*
- *Freight rail to increase by 92 percent*

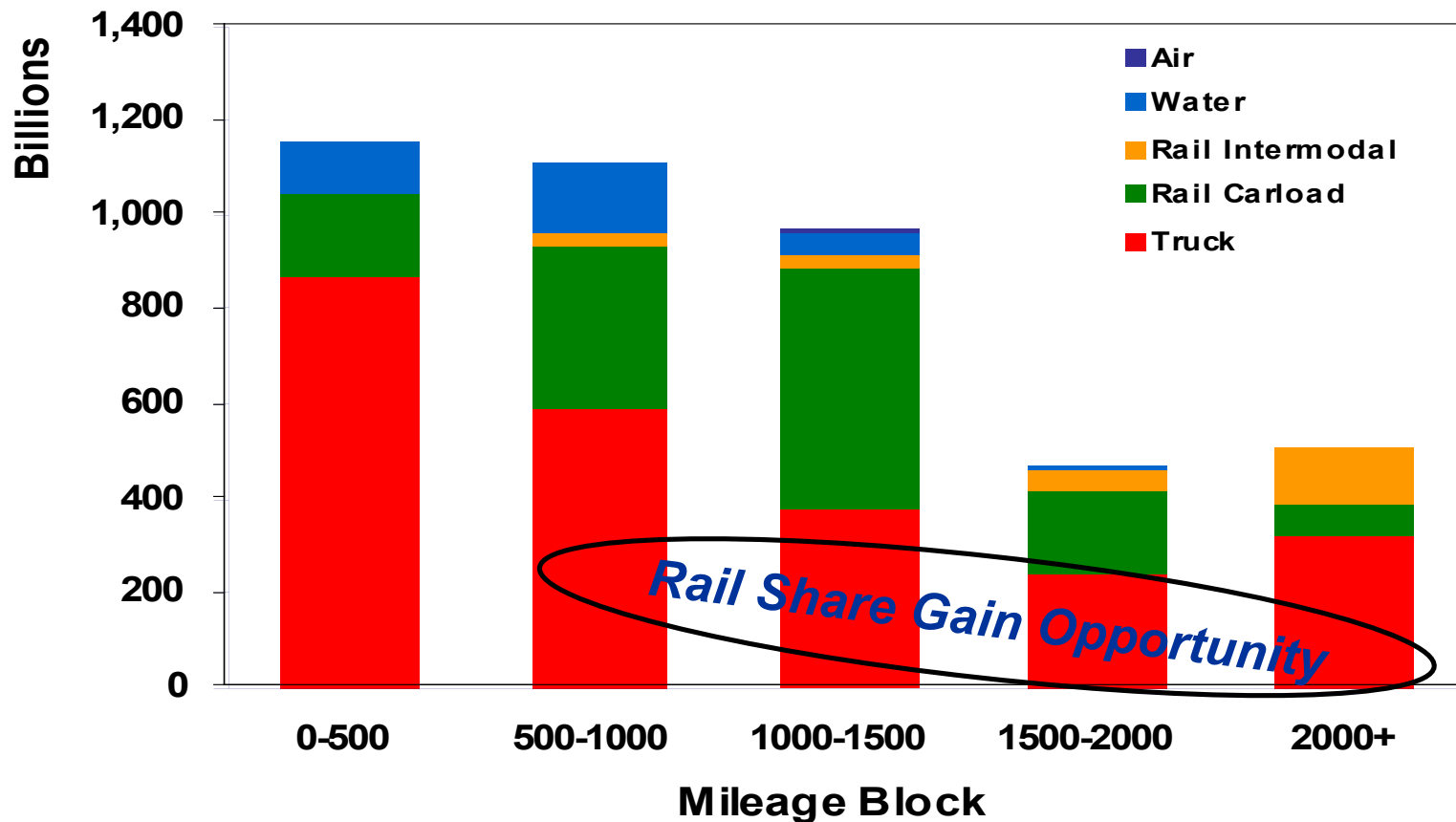
Challenges

- *No national freight priority*
- *No capacity growth*
- *Congestion across all modes*
- *Increasing fuel costs*
- *Lengthening supply chains*
- *Increased environmental requirements*



Rail Freight Future: Mode Optimization

Intercity Freight Ton-Miles by Mode and Mileage Block, 2007



Source: IHS Global Insight Transearch database, 2007